

Meeting with ALSTOM on 10/15/03 at IPSC.

Those present:

Jon P. Christensen IPSC

David M. Smith ALSTOM

Roger Grace

Steve

John

Ivan

John A. Benz Sargent & Lundy

The purpose of the meeting was to review the contract and walk down the Variable Speed Drive (VFD) room as part of IPSC's reliability improvement project for the I D Fans.

IPSC (Jon Christensen) stated that Gerry Finlinson is the controls engineer, Pam Bahr is the electrical engineer, Kevin Miller is the maintenance planner, and Bob Wright is the supervisor of the Unit 2 electricians.

All technical items should be directed to Jon Christensen and all commercial items should be directed to John Larson. ALSTOM (Steve) said that the T&C's were all agreed to.

IPSC reminded ALSTOM that they needed to forward the letter to IPSC stating that they will support the VFD's that are part of the project for the next 20 years including spare part availability. This will become part of the contract.

Action: ALSTOM to provide letter week of 10/20/03.

The Unit 2 outage starts after load reduction in LA on 2/27/04, at 7 AM on the 28th IPSC electricians will disconnect all field cables and pull them back to the cable tray under the drives. This is scheduled for one day, the removal of 2D existing VFD's will start on 2/29/04 and the setting in place of the new 2D drives will be complete on 3/1/04.

ALSTOM will be on site for inspection of the new equipment. After inspection ALSTOM shall provide a letter to IPSC stating that the equipment is installed correctly and the warranty is in effect.

IPSC requested advanced training for their personal so they can become familiar with the system and the controls. ALSTOM stated that they have a 4-day class but it includes some generic information on LCI type drives. ALSTOM may reduce the class to a 3-day class since the majority of IPSC personal are familiar with LCI drives. ALSTOM to provide a quote to IPSC for a training class on just the controls with additional time for generic LCI training if IPSC would want to sent some personal for generic training.

Action: ALSTOM to provide letter week of 10/20/03.

Spare parts was discussed and it was agreed that any spare parts that are used during startup will be replaced at no cost to IPSC this is necessary so IPSC has a full set of spare parts after startup.

It was agreed that there would be a status conference call every two weeks the exact day will be agreed upon later.

The schedule in the proposal was discussed and it was agreed that the days for submittal are working days not calendar days. Based on this the following is a list of submittals and the dates they are due.

TASKS	DATE
Efficiency & pf values	10/27/03 (15 days)
Detailed schedule	10/27/03 (15 days)
Detailed Engineering Sch	10/27/03 (15 days)
Procurement sch	10/27/03 (15 days)
Outline drawings	10/27/03 (15 days)
Design conference	10/27/03 (15 days)
Torsional Analysis HOLD	11/3/03 (20 days)
Interface & Seismic	11/3/03 (20 days)
Anchor bolt complete	11/3/03 (20 days)
Schematic & Wiring	11/17/03 (30 days)
Hazardous Material Doc	11/3/03 (20 days)
I/O list to plant control	11/3/03 (20 days)
Block diagrams	11/3/03 (20 days)
Single lines	11/3/03 (20 days)
Recommended erection	11/3/03 (20 days)

ALSTOM handed out a schedule that showed the wiring and schematics much earlier 10/27/03. After some discussion it was agreed that the drawings would be submitted via AUTO CAD with one hard copy. It was also agreed that the drawing (outlines, wiring and schematics and I/O list would be submitted by the end of October and that a review meeting would be held the first week of November (11/4/03) at IPSC office. ALSTOM to confirm the date by 10/21/03.

Action: ALSTOM to confirm date for drawing review at IPSC office.

IPSC stressed the on site date and stated that the drive shall be on site no latter than 2/25/04.

The water to water heat exchanger was discussed and IPSC confirmed that their water is a 50-50 mixture of water and glycol. ALSTOM stated that they intend to use pure water in their equipment.

The color of the drive cabinets was discussed and ALSTOM stated they would provide any color IPSC wanted. It was agreed that the cabinet would be ANSI 61 gray.

IPSC stressed the fact that MSDS sheets were required on everything including the resin, touch up paint and any lubricant that is furnished.

IPSC stressed that their unique number had to be added to all ALSTOM drawings and on anything that interfaces with IPSC.

ALSTOM stated that no special tools were required. After some discussion it was agreed that a special crimp tool may be required to replace some internal wiring if it ever became necessary. ALSTOM to provide cut sheets on any special tools required.
Action: ALSTOM to provide cut sheets the week of 10/20/03.

IPSC stressed that everything had to be screwed down including the wire raps no glueing is allowed however it is acceptable to use stickon wire raps providing they are screwed down before shipment. IPSC also requested that AVO International (States) type terminal blocks be used for all connections to IPSC wiring. Indicating lights were also discussed and IPSC stressed that all indicating lights should be large i.e. 32 mm. ALSTOM to verify that indicating lights are being furnished for the contactor.

Instruction books were discussed and ALSTOM requested that have at least one month after startup to include all documentation in the instruction books. IPSC stated they would not award the next drive until they have received all documentation including final instruction books and had sufficient time to review them, a minimum of 30 days.

The interface with the motor was discussed. IPSC requested a letter from ALSTOM detailing everything that TECO Westinghouse had to review including what was necessary for 8200 HP and single channel operation. The list should be very specific.
Action: ALSTOM to provide letter week of 10/20/03.

ALSTOM to provide a take out price for deletion of the torsional analysis.
Action: ALSTOM to provide takeout price the week of 10/20/03.

The I/O list was discussed and it was agreed that ALSTOM would submit a revised I/O list based on the external cabling and submit to IPSC early next week. ALSTOM stated they would wire all spare I/O points to terminal blocks.
Action: ALSTOM to submit revised I/O list by 10/22/03.

The only items on the doors of the drive will be the HMI, a reset push button and the programming port.

ALSTOM discussed an encoder and suggested that it be added to the motor. IPSC will investigate and inform ALSTOM if they plan on adding it.

John Benz
10/17/03